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## **EDUCATION:**

2000 Ph.D. University of California at Santa Cruz, Santa Cruz, CA

Earth Sciences Department, Concentrations: Coastal Geology and Oceanography

1996 B.Sc. University of Delaware, Newark, DE

Geology Department, Concentrations: Geomorphology and Sedimentology

## **RESEARCH EXPERIENCE:**

2002-present Research Geological Oceanographer

Coastal and Marine Geology Program, US Geological Survey

2002-present Research Associate

Institute for Marine Sciences, University of California at Santa Cruz

2002-2004 Research Fellow

Partnership for Interdisciplinary Studies of Coastal Oceans Consortium

2000-2002 Post-doctoral Researcher

Institute for Marine Sciences, University of California at Santa Cruz

1996-2000 Graduate Student Researcher

Earth Sciences Department, University of California at Santa Cruz

### **RESEARCH INTERESTS:**

- Coral reef and rocky shoreface morphology, hydrodynamics, sediment distribution and the resulting modes of sediment transport
- The influence of coastal hydrodynamics on nearshore rock and reef biologic communities
- The interplay between geologic structure, climatic fluctuations and coastal processes
- The influence of extreme storm events on the geomorphic evolution of coastlines
- High-resolution oceanographic instrumentation and coastal mapping techniques

### **PUBLICATIONS:**

Erikson, L.H., Storlazzi, C.D., and Jensen, R.E., 2011. "Wave climate and trends along the eastern Chukchi Arctic Alaska coast." *Solutions to Coastal Disasters* 2011, p. 273-285. DOI: 10.1061/41185(417)25.

Field, M.E., Ogston, A.S., and Storlazzi, C.D., 2011. "Rising sea level may cause decline of fringing coral reefs." EOS, Transactions of the American Geophysical Union, v. 92(33), p. 273-274.

Hoeke, R.K., Storlazzi, C.D., and Ridd, P.V., 2011. "Hydrodynamics of a bathymetrically complex fringing coral reef embayment: wave climate, in situ observations and wave

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- Storlazzi, C.D., Fregoso, T.A., Golden, N.E., and Finlayson, D.P., 2011. "Sediment dynamics and the burial and exhumation of bedrock reefs along an emergent coastline as elucidated by repetitive sonar surveys: Northern Monterey Bay, CA." *Marine Geology*, v. 289, p. 46-59. DOI: 10.1016/j.margeo.2011.09.010
- Storlazzi, C.D., Elias, E., Field, M.E., and Presto, M.K., 2011. "Numerical modeling of the impact of sea-level rise on fringing coral reef hydrodynamics and sediment transport." *Coral Reefs*, v. 30(1), p. 83-96. DOI: 10.1007/s00338-011-0723-9.
- Storlazzi, C.D., Field, M.E., and Bothner, M.H., 2011. "The use (and misuse) of sediment traps in coral reef environments: Theory, observations, and suggested protocols." *Coral Reefs*, v. 30, p. 23-38. DOI: 10.1007/s00338-010-0705-3.
- Storlazzi, C.D., Field, M.E., Elias, E., and Presto, M.K., 2011. "The influence of sea-level rise on fringing reef sediment dynamics: Field observations and numerical modeling." *Coastal Sediments* 2011, v. 1, p. 244-257.
- Cronin, K., van Ormondt, M., Storlazzi, C.D., Presto, M.K., and Tonnon, P.K., 2011. "Nearshore disposal of fine-grained sediment in a high-energy environment: Santa Cruz Harbor case study" *Coastal Sediments* 2011, v. 1, p. 616-627.
- Storlazzi, C.D., and Reid, J.A., 2010. "The influence of El Niño-Southern Oscillation (ENSO) cycles on wave-driven sea-floor sediment mobility along central California continental margin." *Continental Shelf Research*, v. 30, p. 1582-1599.
- Peery, M.Z., Newman, S.H., Storlazzi, C.D., and Beissinger, S.R., 2009. "Meeting reproductive demands in a dynamic upwelling system: foraging strategies of a pursuit-diving seabird, the Marbled Murrelet." *The Condor*, v. 111(1), p. 120-134.
- Draut, A.E., Bothner, M.H., Reynolds, R.L., Field, M.E., Cochran, S.A., Logan, J.B., Storlazzi, C.D., and Berg, C.J., 2009. "Supply and dispersal of seasonal flood deposits in Hanalei Bay, Kaua'i, HI, USA: Implications for coral-reef ecosystems." *Geological Society of America Bulletin*, v. 121(3-4), p. 574-585.
- Storlazzi, C.D., Field, M.E., Bothner, M.H., Presto M.K., and Draut, A.E., 2009. "Controls on sediment dynamics in a coral reef embayment: Hanalei Bay, Kauai." *Marine Geology*, v. 264, p. 140-151.
- Revell, D.L., Barnard, P.L., Mustain, N., and Storlazzi, C.D., 2008. "The influence of harbor construction on downcoast beach morphologic evolution: Santa Barbara, CA." *Solutions to Coastal Disasters* 2008, p. 630-642.

- Storlazzi, C.D. and Jaffe, B.E., 2008. "The relative contribution of processes driving variability in flow, shear, and turbidity over a fringing coral reef: West Maui, Hawaii" *Estuarine Coastal and Shelf Science*, v. 77(4), p. 549-564.
- Piniak, G.A. and Storlazzi, C.D., 2008. "Diurnal variability in turbidity and coral fluorescence on a fringing reef flat: Southern Molokai, Hawaii" *Estuarine Coastal and Shelf Science*, v. 77(1), p. 56-64.
- Wingfield, D.K. and Storlazzi, C.D., 2007. "Variability in oceanographic and meteorologic forcing along Central California and its implications on nearshore processes" *Journal of Marine Systems*, v. 68, p. 457-472.
- Phillips, E.L., Storlazzi, C.D., Dartnell, P. and Edwards, B.D., 2007. "Exploring rippled scour depressions offshore Huntington Beach, CA" *Coastal Sediments* 2007, v. 3, p. 1851-1864.
- Vitousek, S., Fletcher, C.H., Merrifield, M.A., Pawlak, G., Storlazzi, C.D., 2007. "Model scenarios of shoreline change at Kaanapali Beach, Maui, Hawaii: Seasonal and extreme events" *Coastal Sediments* 2007, v. 2, p. 1227-1240.
- Storlazzi, C.D., McManus, M.A., Logan, J.B., and McLaughlin, B.E., 2006. "Cross-shore velocity shear, eddies, and heterogeneity in water column properties over fringing coral reefs: West Maui, Hawaii" *Continental Shelf Research*, v. 26, p. 401-421.
- Storlazzi, C.D., Brown, E.K., and Field, M.E., 2006. "The application of acoustic Doppler current profilers to measure the timing and patterns of coral larval dispersal" *Coral Reefs*, v. 25, p. 369-381.
- Bothner, M.H., Reynolds, R.L., Casso, M.A., Storlazzi, C.D. and Field, M.E., 2006. "Quantity, composition and source of sediment collected in sediment traps along the fringing coral reef off Molokai, Hawaii" *Marine Pollution Bulletin*, v. 52(9), p. 1034-1047.
- Presto, M.K., Ogston, A.O., Storlazzi, C.D., Field, M.E., 2006. "Temporal and spatial variability in the flow and dispersal of suspended-sediment on a fringing reef flat, Molokai, Hawaii" *Estuarine Coastal and Shelf Science*, v. 67, p. 67-81.
- Storlazzi, C.D., Brown, E., Field, M.E., Rogers, K., and Jokiel, P.L., 2005. "A model for wave control on coral breakage and species distribution in the Hawaiian Islands" *Coral Reefs*, v. 24, p. 43-55.
- Adams, P.N., Storlazzi, C.D., and Anderson, R.S., 2005. "Nearshore wave-induced cyclical flexing of seacliffs" *Journal of Geophysical Research-Earth Surface*, v. 110, F02002, DOI:10.1029/2004JF000217.
- McManus, M.A., Cheriton, O.M., Drake, P.J., Holliday, D.V., Storlazzi, C.D., Greenlaw, C.E., and Donaghay, P.L., 2005. "Thin layers and the transport and retention of marine plankton in coastal systems" *Marine Ecology Progress Series*, v. 301, p. 199-215.
- Drake, P., McManus, M.A., and Storlazzi, C.D., 2005. "Local wind forcing of the Monterey Bay area inner shelf" *Continental Shelf Research*, v. 25, p. 397-417.
- Storlazzi, C.D., Ogston, A.S., Bothner, M.H., Field, M.E., and Presto M.K., 2004. "Wave- and tidally-driven flow and sediment flux across a fringing coral reef: South-central Molokai, Hawaii" *Continental Shelf Research*, v. 24(12), p. 1397-1419.

- Ogston, A.S., Storlazzi, C.D., Field, M.E. and Presto, M.K., 2004. "Currents and suspended sediment transport on a shallow reef flat: South-central Molokai, Hawaii" *Coral Reefs*, v. 23, p. 559-569.
- Engels, M.S., Fletcher, C.H., Field, M.E., Storlazzi, C.D., Grossman, E.E., Rooney, J.B., Conger, C.L., and Glenn, C., 2004. "Holocene reef accretion: southwest Molokai, Hawaii" *Journal of Sedimentary Research*, v. 74(2), p. 255-269.
- Storlazzi, C.D., Logan, J.B., and Field, M.E., 2003. "Quantitative morphology of a fringing reef tract from high-resolution laser bathymetry: Southern Molokai, Hawaii" *Geological Society of America Bulletin*, v. 115, no. 11, p. 1344–1355.
- Storlazzi, C.D., McManus, M.A., and Figurski, J.D., 2003. "Long-term high-frequency ADCP and temperature measurements along central California: Insights into upwelling and internal waves on the inner shelf" *Continental Shelf Research*, v. 23, p. 901-918.
- Storlazzi, C.D., Field, M.E., Dykes, J.D., Jokiel, P.L., and Brown, E., 2002. "Wave Control on Reef Morphology and Coral Distribution: Molokai, Hawaii" *WAVES 2001 Conference Proceedings*, American Society of Civil Engineers, San Francisco, California, v. 1, p. 784-793.
- Storlazzi, C.D., and Jaffe, B.E., 2002. "Flow and sediment suspension events on the inner shelf of central California" *Marine Geology*, v. 181, p. 195-213.
- Storlazzi, C.D. and Field, M.E., 2000. "Sediment distribution and transport along a rocky, embayed coast: Monterey Peninsula and Carmel Bay, California" *Marine Geology*, v. 170, no. 3-4, p. 289-316.
- Storlazzi, C.D. and Griggs, G.B., 2000. "The influence of El Niño-Southern Oscillation (ENSO) events on the evolution of central California's shoreline" *Geological Society of America Bulletin*, v. 112, no. 2, p. 236-249.
- Storlazzi, C.D., Willis, C.M., and Griggs, G.B., 2000. "Comparative impacts of the 1982-83 and 1997-98 El Niño winters on the central California coast" *Journal of Coastal Research*, v. 17, no. 4, p. 1022-1036.
- Storlazzi, C.D., 2000. "Hydrodynamics, sediment transport and El Niño-induced seacliff erosion along the coastline of central California" Ph.D. Thesis, University of California at Santa Cruz. 137+ p.
- Benumof, B.T., Storlazzi, C.D., Seymour, R.J., and Griggs, G.B., 2000. "The relationship between incident wave energy and seacliff erosion rates: San Diego County, California" *Journal of Coastal Research*, v. 17, no. 4, p. 1162-1178.
- Field, M.E., Storlazzi, C.D., Calhoun, R.S., and Cochran, S.A., 2000. "Sedimentation patterns on the fringing reef off southern Moloka'i, Hawai'i" *Proceedings of the National Beach Preservation Conference 2000*, American Shore and Beach Preservation Association, August 2000, Kaanapali, Maui, Hawai'i, p. 67-69.
- Ogston, A.S., Storlazzi, C.D., and Field, M.E., 2000. "Observations of physical processes and sediment transport on a shallow reef flat: South-central Moloka'i, Hawai'i" *Proceedings of the National Beach Preservation Conference 2000*, American Shore and Beach Preservation Association, August 2000, Kaanapali, Maui, Hawai'i, p. 86-88.

Storlazzi, C.D., Field, M.E., Anima, R., and Tait, J.F., 1999. "The influence of tectonics and sea level fluctuations on sediment distribution and modes of littoral transport along the rocky inner shelf of central California" Proceedings of the International Geological Correlation Program #437 – Coastal Environmental Change During Sea-Level Highstands Conference, November 1999, Honolulu, Hawaii, p. 205-206.

Storlazzi, C.D. and Griggs, G.B., 1998. "The 1997-98 El Niño and erosion processes along the central coast of California" *Shore and Beach*, v. 66, no. 3, p. 12-17.

Hapke, C., Gibbs, A., Richmond. B., Hampton, M., Jaffe, B., Dingler, J., Sallenger, A., Benumof, B., Brown, K., Griggs, G., Moore, L., Scholar, D., Storlazzi, C., Krabill, W., Swift, R., Brock, J., 1998. "A Collaborative program to investigate the impacts of the 1997-98 El Niño winter along the California coast" *Shore and Beach*, v. 66, no. 3, p. 24-32.

Madsen, J.A., McGeary, S., Krantz, D.E., McIntire, S.S., Daniels, W.F., and Storlazzi, C.D., 1994. "Ground Penetrating Radar Investigation of a Wetlands Replacement Site" *GPR* '94, Proceedings of the Fifth International Conference on Ground Penetrating Radar, June 12-16, Kitchner, Ontario, p. 540-551.

### PEER-REVIEWED SCIENTIFIC REPORTS:

Storlazzi, C.D., Presto, M.K., and Brown, E.B., 2011. "Coastal Circulation and Water Column Properties off Kalaupapa National Historical Park. Measurements of waves, currents, temperature, salinity, and turbidity: 2008 – 2009." *USGS Open-File Report 2011-1154*, 33 p. <a href="http://pubs.usgs.gov/of/2011/1154/">http://pubs.usgs.gov/of/2011/1154/</a>

Draut, A.E., Conaway, C.H., Echols, K.R., Storlazzi, C.D., and Ritchie, A., 2011. "Suspended sediment and organic contaminants in the San Lorenzo River, California, water years 2009-2010." *USGS Open-File Report 2011-1120*, 24 p. and data tables <a href="http://pubs.usgs.gov/of/2011/1120/">http://pubs.usgs.gov/of/2011/1120/</a>

Storlazzi, C.D., Conaway, C.H., Presto, M.K., Logan, J.B., Tonnon, P.K., van Ormondt, M., Lescinski, J., Harden, E.L., and Lacy, J.R., 2010. "The Dynamics of Fine-Grained Sediment Dredged from Santa Cruz Harbor." *USGS Open-File Report 2011-1045*, 110 p. <a href="http://pubs.usgs.gov/of/2011/1045">http://pubs.usgs.gov/of/2011/1045</a>

Storlazzi, C.D., Presto, M.K., Logan, J.B., and Field, M.E., 2010. "Coastal Circulation and Sediment Dynamics in Maunalua Bay, Oahu, Hawaii. Measurements of waves, currents, temperature, salinity, and turbidity: November 2008 – February 2009." *USGS Open-File Report* 2010-1217, 60 p. http://pubs.usgs.gov/of/2010/1217

Grossman, E.E., Logan, J.B., Presto, M.K., and Storlazzi, C.D., 2010. "Submarine groundwater discharge and fate along the coast of Kaloko-Honokohau National Historical Park, Island of Hawai'i; Part 3, Spatial and temporal patterns in nearshore waters and coastal groundwater plumes, December 2003-April 2006." *USGS Scientific Investigations Report 2010-5081*, 76 p. <a href="http://pubs.usgs.gov/sir/2010/5081/">http://pubs.usgs.gov/sir/2010/5081/</a>

Storlazzi, C.D., ed., 2010. "US Geological Survey Western Coastal and Marine Geology Team Habitats and Ecosystem Studies Assessment." Report for the USGS Southwest Area Regional Headquarters, 26 p.

- Elias, E., Storlazzi, C.D., Field, M.E., and Presto, M.K., 2010. "Modeling sediment transport on the south Moloka'i, Hawai'i, fringing coral reef." Report for the USGS Southwest Area Regional Headquarters, 45 p.
- Presto, M.K., Storlazzi, C.D., and Field, M.E., 2010. "Sediment Dynamics off two watersheds on the north coast of Kahoolawe. Measurements of turbidity, stream discharge, and rainfall: November 2005 to October 2008." *USGS Open-File Report 2010-1037*, 18 p. <a href="http://pubs.usgs.gov/of/2010/1037/">http://pubs.usgs.gov/of/2010/1037/</a>
- Storlazzi, C.D., Presto, M.K., and Logan, J.B., 2009. "Coastal Circulation and Sediment Dynamics in War-in-the-Pacific National Historical Park, Guam. Measurements of waves, currents, temperature, salinity, and turbidity: June 2007 January 2008." *USGS Open-File Report* 2009-1195, 79 p. <a href="http://pubs.usgs.gov/of/2009/1195/">http://pubs.usgs.gov/of/2009/1195/</a>
- Storlazzi, C.D., Presto, M.K., Logan, J.B., and Field, M.E., 2008. "Coastal Circulation and Sediment Dynamics in Hanalei Bay, Kauai. PART IV: Measurements of waves, currents, temperature, salinity, and turbidity: June August, 2006." *USGS Open-File Report 2008-1295*, 29 p. <a href="http://pubs.usgs.gov/of/2008/1295/">http://pubs.usgs.gov/of/2008/1295/</a>
- Storlazzi, C.D. and Field, M.E., 2008. "Winds, Waves, Tides, and the Resulting Flow Patterns and Fluxes of Water, Sediment, and Coral Larvae off West Maui, Hawaii." *USGS Open-File Report 2008-1215*, 13 p. <a href="http://pubs.usgs.gov/of/2008/1215/">http://pubs.usgs.gov/of/2008/1215/</a>
- Storlazzi, C.D., Golden, N.E., and Finlayson, D.P., 2008. "Views of the Seafloor in Northern Monterey Bay, California" *USGS Scientific Investigations Map 3007*, 1 p. <a href="http://pubs.usgs.gov/sim/3007/">http://pubs.usgs.gov/sim/3007/</a>
- Field, M.E., Cochran, S.A., Logan, J.B. and Storlazzi, C.D., eds., 2008, "The Coral Reef of South Moloka'i, Hawai'i—Portrait of a Sediment-Threatened Fringing Reef" *USGS Scientific Investigation Report 2007-5101*, 180 p. <a href="http://pubs.usgs.gov/sir/2007/5101/">http://pubs.usgs.gov/sir/2007/5101/</a>
- Storlazzi, C.D., Reid, J.A., and Golden, N.E., 2007. "Wave-Driven Spatial and Temporal Variability in Seafloor Sediment Mobility in the Monterey Bay, Cordell Bank, and Gulf of the Farallones National Marine Sanctuaries" *USGS Scientific Investigations Report 2007-5233*, 84 p. <a href="http://pubs.usgs.gov/sir/2007/5233/">http://pubs.usgs.gov/sir/2007/5233/</a>
- Presto, M.K., Storlazzi, C.D., Logan, J.B. and Grossman, E.E., 2007. "Submarine ground water discharge and fate along the coast of Kaloko-Honokohau National Historical Park, Hawaii. Part I: Time-series measurements of currents, waves and water properties: November, 2005 July, 2006" *USGS Open-File Report 2007-1310*, 47 p. <a href="http://pubs.usgs.gov/of/2007/1310/">http://pubs.usgs.gov/of/2007/1310/</a>
- Storlazzi, C.D., Barnard, P.L., Collins, B.D., Finlayson, D.P., Golden, N.E., Hatcher, G.A., Kayen, R.E., and Ruggiero, P., 2007. "High-Resolution Topographic, Bathymetric and Oceanographic Data for the Pleasure Point Area, Santa Cruz County, California: 2005-2007" *U.S. Geological Survey Open-File Report 2007-1270*, 23 p. <a href="http://pubs.usgs.gov/of/2007/1270/">http://pubs.usgs.gov/of/2007/1270/</a>

- Storlazzi, C.D., Presto, M.K., Logan, J.B. and Field, M.E., 2006. "Coastal Circulation and Sediment Dynamics in Hanalei Bay, Kauai. PART I: Measurements of waves, currents, temperature, salinity and turbidity: June August, 2005." *USGS Open-File Report* 2006-1085, 35 p. <a href="http://pubs.usgs.gov/of/2006/1085/">http://pubs.usgs.gov/of/2006/1085/</a>
- Draut, A.E., Field, M.E., Bothner, M.H., Logan, J.B., Casso, M.A., Baldwin, S.M., and Storlazzi, C.D., 2006. "Coastal Circulation and Sediment Dynamics in Hanalei Bay, Kauai. PART II: Tracking recent fluvial sedimentation using isotope stratigraphy obtained in summer 2005." *USGS Open-File Report 2006-1125*, 52 p. <a href="http://pubs.usgs.gov/of/2006/1125/">http://pubs.usgs.gov/of/2006/1125/</a>
- Storlazzi, C.D. and Wingfield, D.K., 2005. "The Spatial and Temporal Variability in Oceanographic and Meteorologic Forcing along Central California: 1980-2002" *USGS Scientific Investigations Report 2005-5085*, 39 pg. <a href="http://pubs.usgs.gov/sir/2005/5085/">http://pubs.usgs.gov/sir/2005/5085/</a>
- Storlazzi, C.D., Russell, M.A., Presto, M.K. and Burbank, J.E., 2005. "Flow Patterns and Current Structure at the *USS Arizona* Memorial: April, 2005" *USGS Open-File Report* 2005-1334, 24 p. http://pubs.usgs.gov/of/2005/1334/
- Storlazzi, C.D. and Presto, M.K., 2005. "Coastal Circulation and Water Column Properties along Kaloko-Honokohau National Historical Park, Hawaii. PART I: Measurements of waves, currents, temperature, salinity and turbidity: April-October 2004" *USGS Open-File Report 2005-1161*, 30 p. <a href="http://pubs.usgs.gov/of/2005/1161/">http://pubs.usgs.gov/of/2005/1161/</a>
- Storlazzi, C.D. and Presto, M.K., 2005. "Coastal Circulation and Sediment Dynamics along West Maui, Hawaii, PART IV: Measurements of waves, currents, temperature, salinity and turbidity in Honolua Bay, Northwest Maui: 2003-2004" *USGS Open-File Report 2005-1068*, 34 p. <a href="http://pubs.usgs.gov/of/2005/1068/">http://pubs.usgs.gov/of/2005/1068/</a>
- Storlazzi, C.D., Field, M.E., Ogston, A.S., Logan, J.B., Presto, M.K. and Gonzales, D.G., 2004. "Coastal Circulation and Sediment Dynamics along West Maui, Hawaii, PART III: Flow and particulate dynamics during the 2003 summer coral spawning season" *USGS Open-File Report* 2004-1287, 36 p. <a href="http://pubs.usgs.gov/of/2004/1287/">http://pubs.usgs.gov/of/2004/1287/</a>
- Storlazzi, C.D., Russell, M.A., Owens, M.D., Field, M.E. and Murphy, L.E., 2004. "Dynamics of the Physical Environment at the USS *Arizona* Memorial: 2002-2004" *USGS Open-File Report* 2004-1353, 28 p. <a href="http://pubs.usgs.gov/of/2004/1353/">http://pubs.usgs.gov/of/2004/1353/</a>
- Hatcher, G.A., Reiss, T.E. and Storlazzi, C.D., 2004. "Application of GPS drifters to track Hawaiian coral spawning" *USGS Open-File Report 2004-1309*, 14 p. <a href="http://pubs.usgs.gov/of/2004/1309/">http://pubs.usgs.gov/of/2004/1309/</a>
- Storlazzi, C.D., Logan, J.B., McManus, M.A., and McLaughlin, B.E., 2003. "Coastal Circulation and Sediment Dynamics along West Maui, Hawaii, PART II: Hydrographic Survey Cruises A-3-03-HW and A-4-03-HW Report on the spatial structure of currents, temperature, salinity and turbidity along Western Maui" *USGS Open-File Report 03-430*, 50 p. <a href="http://pubs.usgs.gov/of/2003/of03-430/">http://pubs.usgs.gov/of/2003/of03-430/</a>
- Storlazzi, C.D. and Jaffe, B.E., 2003. "Coastal Circulation and Sediment Dynamics along West Maui, Hawaii, PART I: Long-term measurements of currents, temperature, salinity and turbidity off Kahana, West Maui: 2001-2003" *USGS Open-File Report 03-482*, 28 p. http://pubs.usgs.gov/of/2003/of03-482/

### **INVITED LECTURES:**

- "Understanding the Residence Time and Advection of Fluvial Sediment out of a Coral Reeflined Embayment." Environmental Fluid Mechanics Laboratory, Stanford University, 11/2011.
- "Observations and Modeling of Habitat Stability on the California Continental Shelf and Its Implications on Benthic Ecosystems." Bodega Marine Laboratory, University of California at Davis, 10/2011.
- "Predicting the Impact of Storm Waves and Sea-level Rise Within the Papahānaumokuākea Marine National Monument." USGS Pacific Islands Ecosystems Research Center, 09/2011.
- "The Dynamics of Fine-Grained Sediment Dredged from Santa Cruz Harbor." Environmental Protection Agency, 06/2011.
- "The Dynamics of Fine-Grained Sediment Dredged from Santa Cruz Harbor." US Army Corps of Engineers, 06/2011.
- "Nearshore disposal of fine-grained sediment in a high-energy environment" California and the World's Ocean 2010 Conference, 09/2010
- "Climate change impacts to US coral reefs." US Army Corps of Engineers and NOAA-Pacific Climate Information System Programs, 07/2010
- "Circulation and sediment dynamics in Maunalua Bay, Oahu." The Nature Conservancy, Hawaii Marine Program, 06/2010
- "USGS's investigations of terrestrial impacts to and marine processes in northern Monterey Bay." Monterey Bay National Marine Sanctuary's Research Activities Panel Meeting, 03/2010
- "Development of and Land-Based Threats to Coral Reefs" University of California at Santa Cruz, Biology Department, 02/2010
- "Observations and Modeling of Habitat Stability on the Central California Continental Shelf." California State University, Moss Landing Marine Laboratory, 02/2010
- "Seabed Instability." University of California at Santa Cruz, Earth Sciences Department, 10/2009
- "Observations and Modeling of the Spatial and Temporal Scales of Sediment Mobility on the Continental Shelf." NOAA Southwest Fisheries Science Center, 06/2009
- "Land-based Threats to Coral Reefs." Cabrillo College, Natural and Applied Science Division, 05/2009
- "Observations and Modeling of the Spatial and Temporal Scales of Sediment Mobility on the Continental Shelf." NOAA Center for Coastal Fisheries and Habitat Research, 04/2009
- "Geologic and Oceanographic Processes that Control the Formation of Bar-built Estuaries." California Regional Water Quality Control Board science staff, 04/2009
- "USGS efforts to understand circulation and sediment dynamics in Maunalua Bay, Oahu" US Coral Reef Task Force, Hawaiian Local Action Strategy, 03/2009

- "An Overview of the Coastal and Marine Geology Program's Coral Reef Project and Its Current Research in Maunalua Bay, Oahu." USGS Pacific Islands Water Science Center, 02/2009
- "The Influence of Climate Change on Coastal Processes and Benthic Habitats: Past Observations, Present Modeling, and Future Projections." US Fish and Wildlife Service and US Geological Survey's "Climate Change, Natural Resources, and Coastal Management Workshop", 01/2009
- "Geologic and Oceanographic Processes that Control the Formation of Bar-built Estuaries." Pescadero Marsh Restoration Forum, 12/2008
- "USGS's Brown-2-Blue studies: Investigating terrestrial impacts on northern Monterey Bay's coastal waters." Monterey Bay National Marine Sanctuary's Research Activities Panel Meeting, 11/2008

Presented USGS Coral Reef Project results to USGS Associate Director Suzette Kimball, 07/2008

- "Possible Issues with Mining Sediment from Submarine Canyons for Beach Restoration", Monterey Bay National Marine Sanctuary's Research Activities Panel Meeting, 05/2008
- "Geologic and Oceanographic Processes at Pleasure Point, California." California Coastal Commission, 06/2007
- "Coastal Erosion Processes Along Central California." Davenport Geological Society, 06/2007
- "El Niño-Southern Oscillation (ENSO) Events and Coastal Erosion Processes Along Central California." California State University, Moss Landing Marine Laboratory, 02/2006
- "The Role of Active Processes in Habitat Studies." National Marine Fisheries Service-University of California at Santa Cruz-US Geological Survey's "Fisheries Science Coordination Meeting", 07/2005
- "Variability in Oceanographic and Meteorologic Forcing along Central California and its Implications on Nearshore Processes." University of California at Santa Cruz, Institute of Marine Sciences, 11/2004
- "Variability in Oceanographic and Meteorologic Forcing along Central California and its Implications on Nearshore Physical and Biologic Processes." National Marine Fisheries Service, Pacific Fisheries Environmental Laboratory, 05/2004
- "Life and Death of Hawaiian Coral Reefs." U.S. Geological Survey's Western Region Public Lecture Series, 02/2004
- "The Influence of Physical Processes on Coral Reefs: Insights from West Maui, Hawaii." University of California at Santa Cruz, Earth Sciences Department, 11/2003

Presented USGS Coral Reef Project results to USGS Director Charles Groat, 10/2003

- "Sediment Dynamics on Hawaiian Reefs: Insights from Southern Molokai, Hawaii." Stanford University, Department of Geological and Environmental Sciences, 03/2003
- "Application of Mapping to Sediment Dynamics Studies and Habitat Analysis on Rocky Inner Shelves." U.S. Geological Survey, Western Region Coastal and Marine Geology Team, 07/2002
- "Sediment Dynamics on Hawaiian Reefs: Insights from Southern Molokai, Hawaii." U.S. Geological Survey, Western Region Coastal and Marine Geology Team, 06/2002
- "Wave Control on Coral Distribution and Fringing Reef Morphology: Southern Molokai, Hawaii." University of Delaware, Institute of Marine Sciences and Department of Geology, 05/2002
- "Wave Control on Coral Distribution and Fringing Reef Morphology: Southern Molokai, Hawaii." University of California at Santa Cruz, Institute of Marine Sciences, 05/2002
- "Cool Tools in Physical Oceanography" University of California's Seymour Marine Discovery Center, 04/2002
- "Long-term High-frequency ADCP and Temperature Measurements Along Central California: Insights into Upwelling and Internal Waves on the Inner Shelf." University of California at Santa Cruz, Institute of Marine Sciences, 11/2001
- "Coastal Hazards and Processes along the Monterey Peninsula and Carmel Bay, CA" Carmel, CA, city council and land use planners, 04/2001
- "El Niño-Southern Oscillation (ENSO) Events and Coastal Erosion Processes along Central California." American Geophysical Union 2000 Fall Meeting, Ocean Sciences Section, Special Session OS-22: Linking Climate Variability and Coastal Processes, 12/2000

## **MEETINGS OR WORKSHOPS CHAIRED:**

- 12<sup>th</sup> International Coral Reef Symposium, Watershed Management and Reef Pollution Session, 2012 (co-chair)
- 15<sup>th</sup> International Ocean Sciences Meeting, Synergistic Interactions Between Stressors to Coral Reefs Session, 2010 (chair)
- 15<sup>th</sup> International Ocean Sciences Meeting, Physical Processes on Coral Reefs and Their Role in Reef Dynamics Session, 2010 (co-chair)
- 15<sup>th</sup> International Ocean Sciences Meeting, Geomorphic Process and Modeling of Rocky and Bluffed Coasts Session, 2010 (co-chair)
- Monterey Bay National Marine Sanctuary's Research Activities Panel Spring Meeting, 2010 (chair)
- 11<sup>th</sup> International Coral Reef Symposium, Hydrodynamics of Coral-Reef Systems Session, 2008 (co-chair)
- Monterey Bay National Marine Sanctuary's Research Activities Panel Fall Meeting, 2008 (chair)
- 1st Monterey Bay Research Consortium's Central California Environmental Modeling Workshop, 2007 (co-chair)
- 6<sup>th</sup> International Symposium on Coastal Sediments, Seafloor Mapping Session, 2007 (co-chair)
- 13<sup>th</sup> International Ocean Sciences Meeting, Environmental Change and Its Impact on Coral Reefs Session, 2006 (chair)
- Monterey Bay National Marine Sanctuary's Research Activities Panel Fall Meeting, 2006

(chair)

- 10<sup>th</sup> International Coral Reef Symposium, The Influence of Storms and Floods on Coral Reef Development Session, 2004 (co-chair)
- 11<sup>th</sup> Pacific Congress on Marine Science and Technology, Hydrodynamics of Coastal Waters Session, 2001 (co-chair)

## JOURNAL AND REPORT REVIEW:

- Nature Geoscience, Journal of Geophysical Research-Oceans, Continental Shelf Research, Coral Reefs, Marine Geology, Sedimentary Geology, Journal of Sedimentary Research, Coastal Estuarine and Shelf Science, Journal of Coastal Research, Marine Ecology Progress Series, Earth Science and Planetary Letters, Climate Research journals (4-6 per
- "Third Intergovernmental Review of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA)" U.S. Department of State, Bureau of Oceans and International Environmental and Scientific Affairs, 2011
- "National Fish, Wildlife, and Plants Climate Adaptation Strategy" USFWS, NOAA, and State Divisions of Fish, Wildlife, and Marine Resources, 2011
- "Coastal Flooding-Potential Projections: 2000-2100" State of California, Public Interest Energy Research Program, California Energy Commission, 2011
- "Ocean Current Study Ocean Dredged Material Disposal Site: Apra Harbor, Guam" NPS Inventory and Monitoring Program, 2011
- "Gulf of the Farallones and Cordell Bank National Marine Sanctuaries Climate Change Site Scenario" NOAA National Marine Sanctuary Program, 2010
- National Science Foundation, Biological Oceanography Program, 2010
- "Kalaupapa National Historical Park Geologic Resources Inventory Report" NPS Geologic Resources Division, 2010
- "Offshore Geophysical Survey Report Supporting the scwd2 Seawater Desalination Facility", City of Santa Cruz, 2010
- "Environmental Fluid Dynamics Codes (EFDC) Model Development and Application for Hanalei Bay, Hawaii", US Environmental Protection Agency (EPA) and State of Hawaii Department of Health, 2010
- National Science Foundation, Biological Oceanography Program, 2009
- "Secretary's 2009 Report on a Comprehensive Offshore Energy Program", US Department of the Interior, 2009
- National Science Foundation, Geomorphology and Land Use Dynamics Program, 2009
- "Coastal Hazard Analysis for Pu'ukohola Heiau National Historic Site and Koloko-Honokohau Historical Park, Big Island, Hawai'i", National Park Service, 2008
- "Environmental Assessment of the Highway 1 Slide Area at Pitkins Curve, Monterey County", California Department of Transportation and the Monterey Bay National Marine Sanctuary (MBNMS), 2008
- "US Army Corps of Engineers' Design for Enhancement of Wave-Induced Circulation at Kaunakakai Harbor, Molokai, Hawaii", State of Hawaii Office of Planning, 2008
  • "Final Environmental Impact Statement for the Monterey Bay National Marine Sanctuary's'
- Joint Management Plan", MBNMS, 2008
- National Science Foundation, Geomorphology and Land Use Dynamics Program, 2008
- "US Army Corps of Engineers Regional Sediment Management Offshore Canyon Capture", MBNMS, 2008
- National Science Foundation, Physical Oceanography Program, 2007
- "Kona Kai Ola Project Draft Environmental Impact Statement", Kaloko-Honokohau National Historical Park, US National Park Service, 2007.
- "Fall 2005 Inner Santa Cruz Harbor Dredge Disposal Monitoring Program", MBNMS, 2006
- "Hydrodynamics and Sediment Dynamics in Elkhorn Slough", MBNMS, 2005

- "Hawaii's Local Action Strategy to Address Land-based Pollution Threats to Coral Reefs", US Coral Reef Task Force, 2004
- Coastal Storms Initiative, Pacific Northwest Pilot Project's "Oregon Coastal Inundation Tool" real-time storm and inundation model, NOAA's Coastal Services Center, 2004
- "A Sediment Trend Analysis (STA) of Santa Cruz and its Vicinity: Implications to Dredge Disposal Operations", MBNMS, 2000
- Seawall engineering proposal, City of Pacific Grove, CA, 2000

## **SCIENTIFIC REVIEW PANELS:**

- US Coral Reef Task Force (USGS/EPA/NOAA/others), Hawaii's Local Action Strategy to Reduce Land-based Pollution Threats to Coral Reefs, 2004-present
- NOAA, Monterey Bay National Marine Sanctuary, coastal geology representative (primary) to the Research Activities Panel, 2005-present
- CenCOOS, Central California Ocean Observing System Program, 2005-present
- State of California, Pescadero Lagoon Working Group, 2007–present
- US Army Corps of Engineers, Santa Cruz Harbor Dredge Disposal Working Group, 2008-2011
- NOAA, West Coast National Marine Sanctuary Program, Ecosystem-Based Management Working Group, 2010-present
- U.S. National Climate Assessment, Pacific Islands Working Group, 2012
- NOAA, Coastal and Marine Ecological Classification Standards, Pacific/Arctic Working Group, 2011
- US Geological Survey Pacific Coastal and Marine Science Center 2011-2020 Science Planning Team, 2010-2011
- City of Santa Cruz, Seawater Desalination Plant Technical Working Group, 2009-2011
- US Army Corps of Engineers and NOAA Workshop on Climate Change and Variability in the Pacific, representing climate change impacts to coral reefs, 2010
- NOAA Marine Protected Area (MPA) and Integrated Ocean Observing System (IOOS) Task Team, 2010
- US Geological Survey Western Coastal and Marine Geology Team Habitats and Ecosystem Studies Assessment (chair), 2010
- State of California and Monterey Bay National Marine Sanctuary, Central California Halibut Trawl Fishery Working Group, 2010
- US Geological Survey, National Climate Change and Wildlife Science Center Proposals, 2010
- NOAA, Monterey Bay National Marine Sanctuary 2009 Condition Report, 2009
- US Geological Survey, National Climate Change and Wildlife Science Center Proposals, 2009
- US Geological Survey, Eastern Region Coral Reef Science 5-year Project Review, 2009
- State of California Department of Transportation, Scott and Waddell Čreek Bridge Replacement/Lagoon Restoration Working Group, 2007–2009
- US Geological Survey, Pacific Southwest Area Integrated Science Workshop on Climate Change, Coastal and Marine Geology Team representative, 2008
- California Department of Boating and Waterways and Santa Cruz County Redevelopment Agency, Pleasure Point Geologic and Oceanographic Processes Technical Working Group, 2005-2008
- US National Park Service and Commonwealth of the Northern Marianas Island's Coastal Resources Management Office, Coastal erosion at American Memorial Park, Saipan, CNMI, 2007
- NOAA, Joint Management Plan for the Cordell Bank, Gulf of the Farallones, and Monterey Bay National Marine Sanctuaries, 2006-2007
- NOAA, Undersea Research Program, Undersea Research on Tropical and Subtropical Marine Ecosystems, 2005
- NOAA, Monterey Bay National Marine Sanctuary, coastal geology representative (alternate) to the Research Activities Panel, 2004-2005
- Hawaiian Department of Natural Resources/Hawaiian Department of Aquatic Resources/University of Hawaii, Hawaii Coral Reef Initiative Research Program, 2004

- Natural Environment Research Council, Physical Oceanography Programme (U.K.), 2004
- National Parks Service, Pacific Islands Coral Reef Program, 2003
- US Geological Survey, Bureau-wide Coral Reef Science 10-year Planning Meeting, 2002
- NOAA, Monterey Bay National Marine Sanctuary 5-year Planning Committee, 2000

## **HONORS AND AWARDS:**

- USGS Coral Reef Project sediment dynamics research was highlighted in the 2011 book, Encyclopedia of Modern Coral Reefs: Structure, Form, and Process (David Hopely, ed.; DOI 10.1007/978-90-481-2639-2). The authors wrote, "Recent research...by the USGS has set the bar for sediment research in coral environments."
- USGS Star Award, for performance, 2011
- Research on sea-level rise impacts to atolls noted as a research highlight by Environment Hawaii (vol. 22, no. 3, pg. 4), 2011
- USGS Star Award, for performance, 2010
- USGS SIM 3007 ("Views of the Seafloor in Northern Monterey Bay, California") selected by the USGS to represent USGS science at the 2010 ESRI International User Conference, 07/2010
- USGS SIR 2007-5101 ("The Coral Reef of South Moloka'i, Hawai'i—Portrait of a Sediment Threatened Fringing Reef") sent by the USGS Office of Communications and USGS Director Suzette Kimball to 33 State Senators and Representative that make up the Senate Committees on the (1) Energy and Environment, and (2) Water, Land, Agriculture, and Hawaiian Affairs, and the House Committees on (3) Energy and Environmental Protection, and (4) Water, Land, and Ocean Resources, 08/2009
- USGS SIR 2007-5101 ("The Coral Reef of South Moloka'i, Hawai'i—Portrait of a Sediment Threatened Fringing Reef") selected as Association of Earth Science Editors' Outstanding Publication of 2009 (print category), 07/2009
- USGS SIR 2007-5101 ("The Coral Reef of South Moloka'i, Hawai'i—Portrait of a Sediment Threatened Fringing Reef") awarded the National Association of Government Communicator's Blue Pencil Award of Excellence for 2009 (technical communication), 04/2009
- USGS SIM 3007 ("Views of the Seafloor in Northern Monterey Bay, California") nominated for Shoemaker Communications Award, 04/2009
- USGS SIR 2007-5101 ("The Coral Reef of South Moloka'i, Hawai'i—Portrait of a Sediment Threatened Fringing Reef") nominated for Shoemaker Communications Award, 04/2009
  • USGS SIR 2007-5101 honored by Hawaii State Senate and House of Representatives as
- Concurrent Resolution #2009-0916 SCR SMA-1, 03/2009
- "Reversing Coral Reef Decline in Hawai'i -- A New Look at a Critical Problem" describing the release of USGS SIR 2007-5101 featured on the USGS Homepage (http://www.usgs.gov/), 11/2008
- USGS Star Award, for service, leadership, and team citizenship, 2008
- War-in-the-Pacific NHP joint USGS-NPS research program highlighted by USGS Director Myers in Sea Technology (January 2008 issue, pg. 31), 2008
- USGS Star Award, for service, leadership, and team citizenship, 2007
- USGS Star Award, for outstanding performance of scientific duties, 2006
- USGS Star Award, for service, leadership, and team citizenship, 2006
- "Coral Reefs and Sea-Level Rise Don't Mix" presentation designated a USGS "Science Pick" of the month in March by the USGS National Center's Communication Office, 2006
- Pleasure Point Project noted as a Ocean Research highlight by Sea Technology (September 2006 issue, pg. 61), 2006
- USGS Star Award for developing partnerships with the State of California and Santa Cruz County, 2005
- USGS Star Award for service as USGS Pacific Science Center's Building Safety Officer,
- USGS Star Award for RGE Panel service, 2004

- West Maui Coastal Circulation Experiment noted as a news highlight by the Marine Pollution Bulletin (vol. 46, pg. 931), 2003
- West Maui Coastal Circulation Experiment designated a USGS "Science Pick" of the month in July and August by the USGS National Center's Communication Office, 2003
- "USGS Help Monitor the USS Arizona Memorial" highlighted in the April issue of *People, Land and Water*, the news magazine of the US Department of the Interior, 2003
- American Geological Institute's "Highlight of the Year Issue" designation in Solid Earth (Geomorphology) Section for Storlazzi and Griggs (2000) GSA Bulletin paper, 2000
- David and Lucile Packard Foundation Postdoctoral Research Fellowship, 2000-2001
- Graduate Assistance in Areas of National Needs Fellowship, 1999
- Tuition Fellowship, University of California, Santa Cruz, 1996
- Regents' Fellowship, University of California, Santa Cruz, 1996
- National Collegiate Natural Science Award, 1994, 1995

### **EXTERNAL FUNDING:**

- 2011-2013: US National Park Service, Inventory & Monitoring (I&M) Program. "Coastal circulation and water-column properties at War-in-the-Pacific National Historical Park (WAPA)" \$188,000 (Principal Investigator)
- 2011-2013: US Fish and Wildlife Service, Inventory & Monitoring (I&M) Program. "Predicting the impact of storm waves and sea-level rise within the Papahanaumokuakea Marine National Monument (PMNM)" \$89,500 (Principal Investigator)
- 2011-2013: US Fish and Wildlife Service, Arctic Landscape Conservation Cooperative. "Modeling Arctic barrier island-lagoon system response to projected Arctic warming" \$173,700 (Co-principal Investigator)
- 2010-2011: NOAA, Hawaiian Coral Reef Initiative Research Program. "Impact of land-derived sediment on the coral reef ecosystem of Pelekane Bay, Hawaii" \$148,900 (Co-principal Investigator)
- 2010-2011: US National Park Service, Kalaupapa National Historical Park. "Hydrography of Kalaupapa National Historical Park's (KALA) coastal waters" \$33,400 (Principal Investigator)
- 2009-2010: US Army Corps of Engineers' Engineer Research and Development Center. "Study of the fate of fine-grain sediment dredged from the Santa Cruz Harbor" \$130,000 (Principal Investigator)
- 2008: David and Lucile Packard Science and Technology Endowment. "Assessing the impacts of fire from watersheds to the nearshore ocean" \$15,000 (Co-principal Investigator)
- 2007-2008: US National Park Service, War in the Pacific National Historical Park. "Circulation and sediment dynamics in War in the Pacific National Historical Park's (WAPA) coastal waters" \$78,900 (Principal Investigator)
- 2005-2007: California Department of Boating and Waterways and Santa Cruz County Redevelopment Agency. "Pleasure Point geologic and oceanographic processes study" \$155,100 (Principal Investigator)
- 2005-2007: US National Park Service, Water Resources Division. "Determining subterranean groundwater nutrient input to Kaloko-Honokohau National Historical Park's (KAHO) coastal ocean ecosystem" \$98,600 (Co-principal Investigator)

- 2004-2005: US National Park Service, Pacific Islands Coral Reef Program. "Coastal circulation and water column properties at Kaloko-Honokohau National Historical Park (KAHO)" \$98,700 (Co-principal Investigator)
- 2002-2005: US National Park Service, Submerged Cultural Resources Center. "Dynamics of the physical environment at the USS Arizona Memorial (USAR)" \$28,900 (Co-principal Investigator)

## **SPECIALTY COURSES:**

- Coastal Sediment Transport Processes, American Society of Civil Engineers, 2011
- Storm Processes, American Society of Civil Engineers, 2007
- MORPH Sediment Transport Model Application short course, Delft Hydraulics, 2007
- FLOW Hydrodynamic Model Application short course, Delft Hydraulics, 2005
- Leadership Intensive Course, US Geological Survey, 2004
- Water Wave Modeling short course, American Society of Civil Engineers, 2001
- SWAN Wave Model Application short course, Delft Hydraulics, 2001

## **QUALIFICATIONS:**

- Master Scuba Diver with Advanced Open-water and Nitrox Certifications (NAUI)
- Scientific/Research Scuba Diver (AAUS, US-DOI); >490 scientific dives
- Class-A and Class-1 Motorboat Operator Certifications (US-DOI)
- First Aid, CPR-Pro, AED and DAN Oxygen Administration Certifications
- Basic Helicopter/Airplane Safety Certification (US-DOI)

### **PROFESSIONAL AFFILIATIONS:**

- American Geophysical Union (AGU), 1994-present
- American Academy of Underwater Sciences (AAUS), 2000-present
- International Society for Reef Studies (ISRS), 2003-present

### **TECHNICAL POSITIONS:**

- Field [Scuba] Diving Safety Officer, US Geological Survey, Pacific Science Center, 2004-present
- Collateral Duty Safety Officer, US Geological Survey, Pacific Science Center, 2003-2009

## FIELD EXPERIENCE:

http://walrus.wr.usgs.gov/infobank/programs/html/scientists2idshtml/s/curt\_storlazzi\_ids.html

## **OUTREACH:**

- Interviewed for a Japanese TV show titled "Kiseki no Chikyu Monogatari" ("Miracle Story of the Earth") about the geology of the Monterey Peninsula and Carmel Bay, California. The documentary series airs on Japan's TV Asahi on Sundays from 6:30 to 7:00 p.m., 2011
- Provided USGS scientific scuba diving information that was incorporated into the book, Scientific Diving Techniques: A Practical Guide for the Research Diver (2<sup>nd</sup> edition), 2011, by J.N. Heine, Best Publishing Company, Palm Beach Garden, Florida, 232 pp.
- Gave talk titled "Nearshore disposal of fine-grained sediment off Santa Cruz Harbor, California." Santa Cruz Port District board of supervisors, 2010
- Wrote USGS SoundWaves August 2010 (No. 150) article, "Tracking Coral Larvae to Understand Hawai'i Reef Health"
- Gave talk titled "Circulation and sediment dynamics in Maunalua Bay, Oahu." Malama Maunalua, 2010
- Interviewed for NBC television's Honolulu, HI, affiliate on coral spawning in Maunalua Bay, Oahu, HI, (made the nightly news' top story) 2010
- Interviewed for National Public Radio's Hawaii affiliate on coral spawning in Maunalua Bay,

Oahu, HI, 2010

- Provided scientific information regarding the influence of storms, sea level, and climate change on the impact of waves on sea cliffs in Santa Cruz, CA, for Santa Cruz County Redevelopment Agency, 2010
- Provided scientific information regarding the impact of waves on corals and coral reef ecosystem health in the Hawaiian Islands for Discovery USA television, 2009
- Gave talk titled "Geologic and Oceanographic Processes that Control the Formation of Barbuilt Estuaries." California Regional Water Quality Control Board governing council, 2009
- Provided underwater photography for USGS's Office of Organizational and Employee Development Science and Technology Training Facility at the Denver Federal Center, 2009
- Gave talk titled "Measuring the Oceanography and Submarine Groundwater Discharge in Maunalua Bay, Oahu." Malama Maunalua, 2009
- Represented the U.S. Geological Survey at a career panel workshop for the University of California at Santa Cruz, Earth Sciences Department, 2008
- Provided scientific information regarding storm, wave, and geologic processes on Maverick's
  for the British Broadcasting Corporation (BBC)'s "Cutting Edge California, Part 5: The
  Natural World". See: <a href="http://cuttingedgecalifornia.com/trails.html">http://cuttingedgecalifornia.com/trails.html</a> and
  <a href="http://www.bbcchannelpartners.com/worldnews/programmes/1000030/">http://www.bbcchannelpartners.com/worldnews/programmes/1000030/</a>, 2008
- Provided scientific information regarding storm, wave, and geologic processes on Maverick's for Fuel-TV. See: <a href="http://www.maverickssurf.com/Common/Article.aspx?id=3476">http://www.maverickssurf.com/Common/Article.aspx?id=3476</a>, 2008
- Provided information on USGS scientific diving operations for Blue Planet Divers web site, 2008. See: <a href="http://www.blueplanetdivers.org/archives/2008/03/us geological s.php">http://www.blueplanetdivers.org/archives/2008/03/us geological s.php</a>
- Provided scientific information regarding the influence of oceanographic and geologic processes on Guam's coral reefs on "K-57" (570 AM, a CBS affiliate) talk radio's "Where We Live" show, 2007
- Wrote USGS SoundWaves October 20
- 07 (No. 98) article, "USGS Researchers Collaborate
  - with National Park Service Scientists to Understand the Impact of Watershed Erosion on Coral Reefs in War-in-the-Pacific National Historical Park, Guam"
- Gave talk titled "Current Biologic Research by the USGS Coastal and Marine Geology Team", University of California at Santa Cruz, Biological Sciences Department's career day, 2007
- Provided scientific information on how winds, waves, and currents off west Maui could potentially transport sewage and contaminants for the Maui (HI) County Council, 2007.
- Designed the USGS Coastal and Marine Geology Team's outreach poster, "Does Pleasure Point need a seawall?", 2007
- Gave talk titled "Current Research by the USGS Coastal and Marine Geology Team in the Monterey Bay National Marine Sanctuary (MBNMS)", Monterey Bay National Marine Sanctuary Research Activities Panel, 2006
- Gave talk titled "U.S. Geological Survey: Who We Are, What We Do and Some Local Projects." Lions Club, Santa Cruz Chapter, 2006
- Participated in Mackay Whitsunday Australian Research Council (ARC) Historical Land Use Reef Connectivity Linkage Project, 2005-2006. See: <a href="http://www.marine.uq.edu.au/mackayarc/people.htm">http://www.marine.uq.edu.au/mackayarc/people.htm</a>
- Participated in press conference on "Environmental Impacts to Coral Reefs" at the 13<sup>th</sup>
   AGU/ASLO/TOS Ocean Sciences Meeting; Associated Press story picked up by 6
   newspapers in Hawaii and the continental US and one radio station in Germany
- Provided scientific information regarding wave processes and ocean safety to Outside Magazine. See: April, 2006 issue on "Killer Abs" (pg. 51-60).
- Provided scientific information regarding wave processes to the Gulf of the Farallones National Marine Sanctuary and Mavarick's Surf Productions. See: <a href="http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2006/02/07/BAGR2H41LF1.DTL">http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2006/02/07/BAGR2H41LF1.DTL</a>, 2006
- Provided scientific information regarding the Pleasure Point Study to the Monterey Bay

- National Marine Sanctuary. See: <a href="http://www.mbnms-simon.org/sections/geology/project-info.php?pid=100284&sec=g">http://www.mbnms-simon.org/sections/geology/project-info.php?pid=100284&sec=g</a>, 2005
- Provided scientific information regarding the Central California Regional Synthesis Project to the Monterey Bay National Marine Sanctuary, 2005. See: <a href="http://www.mbnms-simon.org/sections/oceanography/project\_info.php?pid=100252&sec=o">http://www.mbnms-simon.org/sections/oceanography/project\_info.php?pid=100252&sec=o</a>, 2005
- Provided scientific information regarding coastal erosion and engineering solutions for KQED's public television's "Coastal Clash" documentary and website. See: <a href="http://www.kqed.org/w/coastalclash/solutions.html">http://www.kqed.org/w/coastalclash/solutions.html</a>, 2005
- Gave talk titled "Life and Death of Hawaiian Coral Reefs." U.S. Geological Survey's Western Region Public Lecture Series, 2004
- Designed the USGS Coastal and Marine Geology Team's outreach posters, "Studying Sediment Impacts on Hawaiian Coral Reefs" and "Drifters Track Hawaiian Coral Spawning", 2004
- Wrote USGS SoundWaves August 2004 (No. 64) article, "10th International Coral Reef Symposium (ICRS)"
- Chaired Current Drifters display and was an Invitation and Publicity Coordinator for USGS's 125th Birthday Celebration/Pacific Science Center Open House, 2004
- Judged the poster sessions at Monterey Bay National Marine Sanctuary's Sanctuary Symposium, 2004
- Interviewed for the National Public Radio series, "Living on Earth" on coral spawning in Hawaii, 2003
- Wrote USGS SoundWaves August 2003 (No. 53) article, "West Maui Coastal Circulation Experiment: Understanding the Movement of Sediment, Coral Larvae and Contaminants along Coral Reefs"
- Interviewed for ABC television's Monterey Bay affiliate on coastal erosion along Santa Cruz, CA, 2003
- Staffed the USGS booth at the Monterey Bay National Marine Sanctuary's annual Shark Festival and Sanctuary Celebration, 2003
- Wrote USGS SoundWaves December 2002 (No. 47) article, "USGS Researchers Collaborate with National Park Service Archeologists to Better Predict the Life Expectancy of the USS Arizona"
- Gave talk titled "Cool Tools in Physical Oceanography" at the University of California's Seymour Marine Discovery Center, 2002
- Gave talk titled "Coastal Hazards and Processes along the Monterey Peninsula and Carmel Bay, CA" to the Carmel, CA, city council and land use planners, 2001
- Participated in Monterey Bay National Marine Sanctuary's Sanctuary Symposium, 1999present
- Interviewed for or research highlighted in 26 newspaper articles in California and Hawaii (2000-2009)

## **BOOK OR REPORT CHAPTERS:**

Storlazzi, C.D., Presto, M.K., Field, M.E., and Russell, M.A., 2010. Dynamics of the Physical Environment on *USS Arizona*: *in* Russell, M.A. and Murphy, L.E., eds., "Long-Term Management Strategies for *USS Arizona*: A Submerged Cultural Resource in Pearl Harbor" National Park Service, Submerged Resources Center, p. 87-122.

Bothner, M.H., Reynolds, R.L., Casso, M.A., Storlazzi, C.D., and Field, M.E., 2008. Sediment Mobility Along Moloka'i's Fringing Coral Reef; Evidence From Sediment Traps: *in* Field, M.E., Cochran, S.A., Logan, J.B. and Storlazzi, C.D., eds., "The Coral Reef of South Moloka'i, Hawai'i—Portrait of a Sediment-Threatened Fringing Reef" *USGS Scientific Investigation Report 2007-5101*, p 147-152, <a href="http://pubs.usgs.gov/sir/2007/5101/sir2007-5101\_chapter19.pdf">http://pubs.usgs.gov/sir/2007/5101/sir2007-5101\_chapter19.pdf</a>

- Field, M.E., Calhoun, R.S., Storlazzi, C.D., Logan, J.B., and Cochran, S.A., 2008. Sediment on the Moloka'i Reef: *in* Field, M.E., Cochran, S.A., Logan, J.B. and Storlazzi, C.D., eds., "The Coral Reef of South Moloka'i, Hawai'i—Portrait of a Sediment-Threatened Fringing Reef" *USGS Scientific Investigation Report* 2007-5101, p 137-144, <a href="http://pubs.usgs.gov/sir/2007/5101/sir2007-5101">http://pubs.usgs.gov/sir/2007/5101/sir2007-5101</a> chapter 17.pdf
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## DATA REQUESTS AND TRANSFERS:

Geologic and oceanographic data for Maui and Lanai, HI, for resource management. State of Hawaii, Department of Aquatic Resources, 2011

Geologic and oceanographic data for Maui and Lanai, HI, for investigating controls on coral reef species' distributions and trends. University of Hawaii, 2011

Bathymetric maps and oceanographic data for northern Monterey Bay, CA, for trawling impact studies. Monterey Bay National Marine Sanctuary, 2010

Bathymetric maps and oceanographic data for northern Monterey Bay, CA, for wave impact studies. City of Santa Cruz, 2010

Oceanographic data for Maunalua Bay, Oahu, HI, for investigating coral spawning patterns. NOAA's Center for Coastal Fisheries and Habitat Research, 2010

Oceanographic data for Maunalua Bay, Oahu, HI, for investigating coral recruitment patterns. University of Hawaii, 2010

Oceanographic data for Hanalei Bay, Kauai, HI, for research and resource management. NOAA's National Oceanographic Data Center (NODC), 2009

Oceanographic data for west Maui, HI, for investigating the impact of invasive algal blooms on coral reefs. University of Hawaii, 2009

Oceanographic data and numerical modeling results for central California for resource management. Point Reyes National Seashore, National Park Service, 2009

Bathymetric maps and oceanographic data for northern Monterey Bay, CA, for proposed seawater desalination plant intake and outfall systems suitability studies. City of Santa Cruz, 2008

Oceanographic data and numerical modeling results for Hanalei Bay, Kauai, HI, for investigating and modeling Total Maximum Daily Loads (TMDL). Environmental Protection Agency and State of Hawaii, Department of Health, 2008

Oceanographic data for Kaloko-Honokohau National Historical Park's waters, Hawaii, HI, for resource management. National Park Service, 2008

Oceanographic data for west Maui, HI, for resource management. State of Hawaii, Department of Aquatic Resources, 2008

Numerical modeling results on wave-driven resuspension on the central California shelf for evaluating trawling impacts for the NOAA Joint Management Plan for the Cordell Bank, Gulf of the Farallones, and Monterey Bay National Marine Sanctuaries. Monterey Bay National Marine Sanctuary (MBNMS), 2007

Bathymetric maps and oceanographic data for northern Monterey Bay, CA, for seawall suitability studies. California Coastal Commission, 2007

Bathymetric maps and oceanographic data for northern Monterey Bay, CA, for seawall suitability studies. Santa Cruz County and California Department of Boating and Waterways, 2007

Oceanographic data for west Maui, HI, for investigating the impact of cruise ships on natural resources. Maui County, 2007

Oceanographic data for Hanalei Bay, Kauai, HI, to calculate allowable TMDLs. Environmental Protection Agency and State of Hawaii, Department of Health, 2006

Oceanographic data for Kaloko-Honokohau National Historical Park's waters, Hawaii, HI, for the proposed State of Hawaii's expansion of the Honokohau marina and associated land development. State of Hawaii, 2006

Oceanographic data for southern Molokai, HI, for research and resource management. NOAA's National Oceanographic Data Center (NODC), 2006

Oceanographic data for western Maui, HI, for research and resource management. NOAA's National Oceanographic Data Center (NODC), 2006

Oceanographic data for southern Oahu, HI, for resource management. National Park Service, 2006

Oceanographic data for the USS Arizona Memorial, Hawaii, HI, for resource management. National Park Service, USS Arizona Memorial, 2005

Oceanographic data for Kaloko-Honokohau National Historical Park's waters, Hawaii, HI, for resource management. National Park Service, Kaloko-Honokohau National Historical Park, 2004

Oceanographic data for west Maui, HI, to calculate allowable TMDLs. Environmental Protection Agency and State of Hawaii, Department of Health, 2004

Oceanographic data for west Maui, HI, for resource management. State of Hawaii, Department of Land and Natural Resources, 2004

Oceanographic data for the USS Arizona Memorial, Hawaii, HI, for resource management. National Park Service, USS Arizona Memorial, 2004

### **COLLABORATIONS:**

Since FY2000: 46 PhD researchers at 16 different institutions Since FY2010: 27 PhD researchers at 9 different institutions

### POSTDOCTORAL SCIENTISTS ADVISED:

Li H. Erikson, USGS Postdoctoral Scientist, 2009-2011, "Arctic Bluff Retreat and Inundation of an Ecologically Sensitive Barrier Island System Due to a Changing Global Climate" Funded by the USGS Mendenhall Program

Christopher H. Conaway, USGS Postdoctoral Scientist, 2008-2010, "Fluvial Deposition in the Coastal Ocean and its Impact on Nearshore Ecosystems" Funded by the USGS Mendenhall Program

## **GRADUATE STUDENT RESEARCH SUPPORT:**

Amy Grady, University of Virginia, "Influence of Climate Change on Wave Dissipation over Coral Reefs and Subsequent Effects on Beach Morphology."

Bryson Robertson, University of Guelph (CA), "Assessing the Impact of Wave Characteristics and Bathymetric Features on Wave Breaking Shape and Energy Intensity."

E. Lynne Harden, UCSC, "Predicting Potential Impacts of Sea-Level Rise on Sandy Beaches in California."

Ronald Hoeke, James Cook University (AU), "Wave-driven circulation in a coral reef embayment"

Sean Vitousek, University of Hawaii (UH), "Model scenarios of shoreline change at Kaanapali Beach, Maui, Hawaii: Seasonal and extreme events."

Eleyne Phillips, UCSC, "Geologic and oceanographic controls on rippled scour depressions offshore Huntington Beach, CA."

Stacy Jupiter, UCSC, "Coral trace element records of terrestrial, agricultural and land-use change in a Great Barrier Reef catchment."

Guy Marion, University of Queensland (AU), "Coral trace element records of historic terrestrial land use in Mackay Whitsunday, central Great Barrier reef"

Peter Adams, UCSC, "Nearshore wave-induced cyclical flexing of seacliffs."

Kathy Presto, University of Washington, "Temporal and spatial variability in the flow and dispersal of suspended-sediment on a fringing reef flat, Molokai, Hawaii."

Mary Engels, UH, "Holocene reef accretion: southwest Molokai, Hawaii."

Johanna Rosman, Stanford University, "Field observations of the flow field in and around Giant Kelp (*Macrocystsis pyrifera*) forests."

Olivia Cheriton, UCSC, "Physical and biological controls on the maintenance and dissipation of a thin phytoplankton layer."